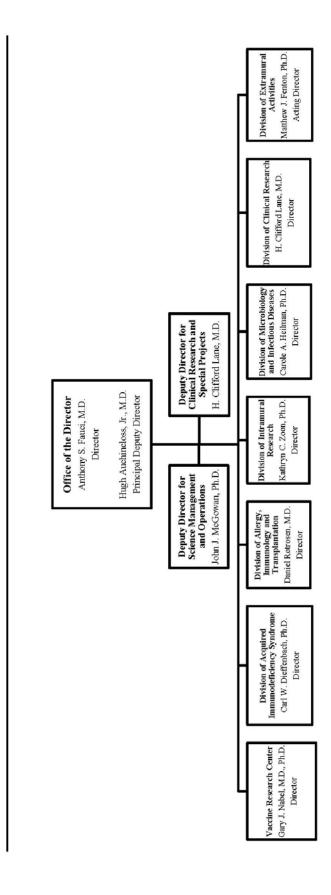
DEPARTMENT OF HEALTH AND HUMAN SERVICES

NATIONAL INSTITUTES OF HEALTH

National Institute of Allergy and Infectious Diseases (NIAID)

FY 2013 Budget	Page No.
Organization Chart	2
Appropriation Language	3
Amounts Available for Obligation	4
Budget Mechanism Table	5
Major Changes in Budget Request	6
Summary of Changes	7
Budget Graphs	9
Budget Authority by Activity	10
Authorizing Legislation	11
Appropriations History	12
Justification of Budget Request	13
Budget Authority by Object Class	23
Salaries and Expenses	24
Detail of Full-Time Equivalent Employment (FTE)	25
Detail of Positions	26

National Institutes of Health National Institute of Allergy and Infectious Diseases Organizational Structure



NATIONAL INSTITUTES OF HEALTH

National Institute of Allergy and Infectious Diseases

(Including Transfer of Funds)

For carrying out section 301 and title IV of the PHS Act with respect to allergy and infectious diseases, [\$4,499,215,000] \$4,495,307,000. (Department of Health and Human Services Appropriations Act, 2012)

Amounts Available for Obligation ¹

(Dollars in Thousands)

Source of Funding	FY 2011 Actual	FY 2012 Enacted	FY 2013 PB
Appropriation	4,818,275	4,499,215	4,495,307
Type 1 Diabetes	0	0	0
Rescission	(42,307)	(8,504)	0
Supplemental	0	0	0
Subtotal, adjusted appropriation	4,775,968	4,490,711	4,495,307
Real transfer under Secretary's transfer authority	0	(1,279)	0
Comparative Transfers for NCATS reorganization	0	0	0
Real transfer to the Global Fund to fight HIV/AIDS, Malaria and Tuberculosis	297,300		
Real transfer to the Global Fund to fight HIV/AIDS, Malaria and Tuberculosis	(297,300)		
Comparative Transfers to NCATS for Therapeutics and Rare and Neglected Diseases (TRND)	(3,689)	0	0
Comparative Transfers to NLM for NCBI and Public Access	(4,098)	(4,335)	0
Subtotal, adjusted budget authority	4,768,181	4,485,097	4,495,307
Unobligated balance, start of year	0	0	0
Unobligated balance, end of year	0	0	0
Subtotal, adjusted budget authority	4,768,181	4,485,097	4,495,307
Unobligated balance lapsing	0	0	0
Total obligations	4,768,181	4,485,097	4,495,307

¹ Excludes the following amounts for reimbursable activities carried out by this account:

FY 2011 - \$23,539 FY 2012 - \$23,539 FY 2013 - \$23,539

Excludes \$16,415 Actual in FY2011; Estimate \$15,030 in FY2012; Estimate \$14,559 in FY2013 for Royalties.

Budget Mechanism - Total ^{1/}
(Dollars in Thousands)

	FY	2011	FY 2012		FY	2013		
MECHANISM	A	ctual	En	acted		PB	Change v	s. FY 2012
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Projects								
Noncompeting	2,809	\$1,848,001	2,635	\$1,794,878	2,535	\$1,686,553	(100)	(\$108,325)
Administrative Supplements	48	19,092	47	19,092	47	19,092	0	0
Competing:								
Renewal	227	120,045	259	124,061	261	263,601	2	139,540
New	767	354,139	868	416,043	833	389,691	(35)	(26,352)
Supplements	0	1,812	0	0	0	0	0	0
Subtotal, Competing	994	\$475,996	1,127	\$540,104	1,094	\$653,292	(33)	\$113,188
Subtotal, RPGs	3,803	\$2,343,089	3,762	\$2,354,074	3,629	\$2,358,937	(133)	\$4,863
SBIR/STTR	231	\$108,135	238	\$111,603	241	\$113,853	3	\$2,250
Research Project Grants	4,034	\$2,451,224	4,000	\$2,465,677	3,870	\$2,472,790	(130)	\$7,113
Research Centers								
Specialized/Comprehensive	36	\$123,055	36	\$123,055	36	\$123,335	0	\$280
Clinical Research	0	0	0	0	0	0	0	0
Biotechnology	0	0	0	0	0	0	0	0
Comparative Medicine	0	801	0	801	0	803	0	2
Research Centers in Minority Institutions	0	439	0	439	0	440	0	1
Research Centers	36	\$124,295	36	\$124,295	36	\$124,578	0	\$283
Other Research								
Research Careers	304	\$39,707	304	\$39,707	304	\$39,797	0	\$90
Cancer Education	0	0	0	0	0	0	0	0
Cooperative Clinical Research	0	0	0	0	0	0	0	0
Biomedical Research Support	0	0	0	0	0	0	0	0
Minority Biomedical Research Support	4	974	4	974	4	976	0	2
Other	98	10,901	98	10,901	98	10,926	0	25
Other Research	406	\$51,582	406	\$51,582	406	\$51,699	0	\$117
Total Research Grants	4,476	\$2,627,101	4,442	\$2,641,554	4,312	\$2,649,067	(130)	\$7,513
Research Training	FTTPs		FTTPs		FTTPs			
Individual Awards	131	\$6,059	131	\$6,059	131	\$6,073	0	\$14
Institutional Awards	1,100	50,738	1,089	50,738	1,084	50,854	(5)	116
Total Research Training	1,231	\$56,797	1,220	\$56,797	1,215	\$56,927	(5)	\$130
Research & Development Contracts	208	\$1,267,236	197	\$969,699	197	\$972.266	0	\$2,567
SBIR/STTR	0	\$1,207,230	0	\$156	0	\$156	0	\$0
SBINSTIN	· ·	φ150	Ü	φ150	Ü	Ψ150	Ü	φσ
	<u>FTEs</u>		<u>FTEs</u>		<u>FTEs</u>		<u>FTEs</u>	
Intramural Research	904	\$536,010	904	\$536,010	895	\$536,010	(9)	\$0
Research Management and Support	955	281,037	955	281,037	946	281,037	(9)	0
Construction		0		0		0		0
Buildings and Facilities		0		0		0		0
Total, NIAID	1,859	\$4,768,181	1,859	\$4,485,097	1,841	\$4,495,307	(18)	\$10,210

^{1/} All items in italics are "non-adds"; items in parenthesis are subtractions.

 $^{2/\,}Funding\,levels\,are\,not\,comparable\,between\,FY\,2011\,and\,FY\,2012\,due\,to\,inclusion\,of\,Global\,Funds\,transfer\,of\,\$297.3M\,in\,FY\,2011.$

Major Changes in the Fiscal Year 2013 President's Budget Request

Major changes by budget mechanism and/or budget activity detail are briefly described below. Note that there may be overlap between budget mechanism and activity detail and these highlights will not sum to the total change for the FY 2013 budget request for NIAID, which is \$10.210 million above the FY 2012 Enacted level, for a total of \$4,495,307,000.

Research Project Grants (+\$7.113 million, total \$2,472.790 million): NIAID will support a total of 3,870 Research Project Grant (RPG) awards in FY 2013. Noncompeting RPGs funding will decrease by \$108.325 million. Competing RPGs funding will increase by \$113.188 million. The re-competition of the HIV/AIDS Clinical Trials Units (CTU) in FY 2013 will result an anomaly in the numbers presenting the average cost of competing HIV/AIDS grants. NIH budget policy for RPGs in FY 2013 discontinues inflationary allowances and reduces the average cost of noncompeting and competing RPGs by one percent below the FY 2012 level.

<u>Biodefense and Emerging Infectious Diseases (+\$1.372 million; total \$1,307.589 million)</u>: NIAID continues its focus on advancing drugs, vaccines and diagnostics for emerging and reemerging pathogens and pathogens that can be used as agents of bioterrorism.

<u>Infectious and Immunologic Diseases (+\$1.027 million; total \$1,040.273 million)</u>: NIAID will increase funds for its Infectious and Immunologic Diseases research portfolio to support critical research on malaria, vaccine development and for selected pathogens which are responsible for significant morbidity and mortality, result in major health care costs and can be difficult to treat due to resistance against multiple antibiotics.

<u>HIV/AIDS</u> Research (+\$7.811 million; total \$1,330.398 million): NIAID will continue funding to support a broad range of HIV/AIDS research, from basic discovery through clinical trials on effective vaccine and non-vaccine prevention strategies.

NATIONAL INSTITUTES OF HEALTH

National Institute of Allergy and Infectious Diseases Summary of Changes

(Dollars in Thousands)

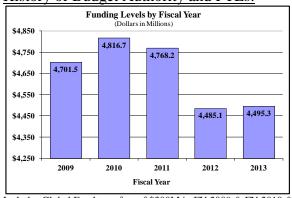
FY 2012 Enacted				\$4,485,097
FY 2013 President's Budget				\$4,495,307
Net change	_	<u>.</u>		\$10,210
	2	2013		
	Preside	nt's Budget	Change fr	om FY 2012
		Budget		Budget
CHANGES	FTEs	Authority	FTEs	Authority
A. Built-in:				
1. Intramural Research:				
a. Annualization of January				
2012 pay increase & benefits		\$148,735		\$9
b. January FY 2013 pay increase & benefits		148,735		471
c. One more day of pay		148,735		572
d. Annualization of PY net hires		148,735		0
e. Payment for centrally furnished services		71,181		0
f. Increased cost of laboratory supplies, materials,				
other expenses, and non-recurring costs		316,094		0
Subtotal				\$1,052
Research Management and Support:				
a. Annualization of January				
2012 pay increase & benefits		\$136,775		\$8
b. January FY 2013 pay increase & benefits		136,775		425
c. One more day of pay		136,775		525
d. Annualization of PY net hires		136,775		0
e. Payment for centrally furnished services		38,625		0
f. Increased cost of laboratory supplies, materials,				
other expenses, and non-recurring costs		105,637		0
Subtotal				\$958
Subtotal, Built-in				\$2,010

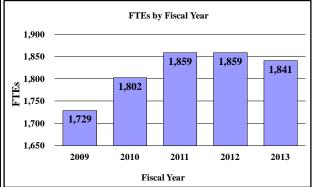
Summary of Changes--continued

		2013		
	Presi	dent's Budget	Change	from FY 2012
CHANGES	No.	Amount	No.	Amount
B. Program:				
1. Research Project Grants:				
a. Noncompeting	2,535	\$1,705,645	(100)	(\$108,325)
b. Competing	1,094	653,292	(33)	113,188
c. SBIR/STTR	241	113,853	3	2,250
Total	3,870	\$2,472,790	(130)	\$7,113
2. Research Centers	36	\$124,578	0	\$283
3. Other Research	406	51,699	0	117
4. Research Training	1,215	56,927	(5)	130
5. Research and development contracts	197	972,266	0	2,567
Subtotal, Extramural		\$3,678,260		\$10,210
	<u>FTEs</u>		FTEs	
6. Intramural Research	895	\$536,010	(9)	(\$1,052)
7. Research Management and Support	946	281,037	(9)	(958)
8. Construction		0		0
9. Buildings and Facilities		0		0
Subtotal, program	1,841	\$4,495,307	(18)	\$8,200
Total changes				\$10,210

Fiscal Year 2013 Budget Graphs

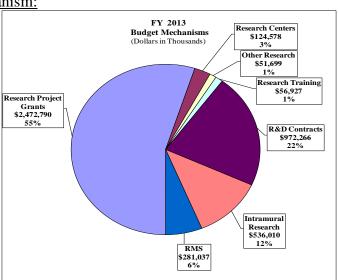
History of Budget Authority and FTEs:



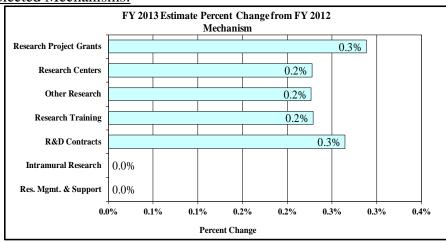


Includes Global Fund transfers of \$300M in FY 2009 & FY 2010 & \$297.3M in FY 2011; funding levels are not comparable between FY 2011 to FY 2012.

Distribution by Mechanism:



Change by Selected Mechanisms:



NATIONAL INSTITUTES OF HEALTH

National Institute of Allergy and Infectious Diseases Budget Authority by Activity

(Dollars in Thousands)

		Y 2011 ctual ^{1/}		Y 2012 acted ^{1/}		Y 2013 PB	Chang FY 2012	^
Extramural Research Detail:	FTEs	Amount	FTEs	Amount	FTEs	<u>Amount</u>	<u>FTEs</u>	<u>Amount</u>
HIV/AIDS 2/		1,312,963		\$1,322,587		\$1,330,398		7,811
Biodefense & Emerging Infectious Diseases 3/		1,305,525		1,306,217		1,307,589		1,372
Infectious & Immunological Diseases		1,332,646		1,039,246		1,040,273		1,027
Subtotal, Extramural		\$3,951,134		\$3,668,050		\$3,678,260		\$10,210
Intramural Research	904	\$536,010	904	\$536,010	895	\$536,010	(9)	\$0
Research Management & Support	955	\$281,037	955	\$281,037	946	\$281,037	(9)	\$0
TOTAL	1,859	\$4,768,181	1,859	\$4,485,097	1,841	\$4,495,307	(18)	\$10,210

^{1/} Funding levels are not comparable between FY 2011 and FY 2012 due to inclusion of Global Funds transfer of \$297.3M in FY 2011. 2/ NIAID's funding levels for HIV/AIDS Total: \$1,563.349M Actual in FY 2011; Estimate \$1,572.973M in FY 2012; Estimate \$1,580.784M in FY 2013.

^{3/}NIAID's funding levels for Biodefense Total: \$1,664.854M Actual in FY 2011; Estimate \$1,665.546M in FY 2012; Estimate \$1,666.918M in FY 2013.

Authorizing Legislation

	PHS Act/ Other Citation	U.S. Code Citation	2012 Amount Authorized	FY 2012 Enacted	2013 Amount Authorized	FY 2013 PB
Research and Investigation	Section 301	42§241	Indefinite		Indefinite	
				. \$4,485,097,000		\$4,495,307,000
National Institute of Allergy and Infectious Diseases	Section 401(a)	42§281	Indefinite		Indefinite	
Total, Budget Authority				\$4,485,097,000		\$4,495,307,000

Appropriations History

Fiscal	Budget Estimate to			
Year	Congress	House Allowance	Senate Allowance	Appropriation
2004	\$4,335,255,000	\$4,335,255,000	\$4,335,255,000	\$4,335,155,000
Rescission				(\$30,593,000)
2005	\$4,440,007,000	\$4,440,007,000	\$4,456,300,000	\$4,440,007,000
Rescission				(\$37,166,000)
2006	\$4,459,395,000	\$4,459,395,000	\$4,547,136,000	\$4,427,895,000
Rescission				(\$44,594,000)
2007	\$4,395,496,000	\$4,270,496,000	\$4,395,496,000	\$4,414,801,050
Rescission				\$0
2008	\$4,592,482,000	\$4,632,019,000	\$4,668,472,000	\$4,641,746,000
Rescission	, , , ,	. , , ,	, , , ,	(\$81,091,000)
Supplemental				\$22,689,000
				, ,,,,,,,,
2009	\$4,568,778,000	\$4,716,283,000	\$4,688,828,000	\$4,702,572,000
Rescission				\$0
2010	\$4,760,295,000	\$4,859,502,000	\$4,777,457,000	\$4,818,275,000
Rescission	Ψ+,700,273,000	Ψ+,032,302,000	Ψ+,777,+37,000	\$0
Rescission				φυ
2011	\$4,977,070,000		\$4,969,301,000	\$4,818,275,000
Rescission				(\$42,307,326)
2012	\$4,915,970,000	\$4,915,970,000	\$4,725,288,000	\$4,499,215,000
Rescission				(\$8,503,516)
2013	\$4,495,307,000			

Justification of Budget Request

National Institute of Allergy and Infectious Diseases

Authorizing Legislation: Section 301 and title IV of the Public Health Service Act, as amended.

Budget Authority (BA):

			FY 2013	
	FY 2011	FY 2012	President's	FY 2013 + / -
	Actual	Enacted	Budget	FY 2012
BA	\$4,768,181,000	\$4,485,097,000	\$4,495,307,000	+\$10,210,000
FTE	1,859	1,859	1,841	-18

Program funds are allocated as follows: Competitive Grants/Cooperative Agreements; Contracts; Direct Federal/Intramural and Other.

Director's Overview

The National Institute of Allergy and Infectious Diseases (NIAID) conducts and supports basic and applied research to better understand, diagnose, prevent, and treat infectious and immune-mediated diseases. Infectious diseases include global killers such as human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS), tuberculosis (TB), and malaria; emerging or re-emerging threats such as influenza, multiple drug-resistant tuberculosis (MDR TB), and methicillin-resistant *Staphylococcus aureus* (MRSA); and "deliberately emerging" threats from potential agents of bioterrorism. Immune-mediated disorders include autoimmune diseases, such as lupus and type 1 diabetes; asthma; allergies; and graft rejection and other problems associated with tissue and organ transplantation. NIAID has a unique mandate to respond to emerging public health threats. Fundamental basic research in microbiology, immunology, and disease pathogenesis is at the heart of this effort. NIAID also has a longstanding commitment to translational research, which seeks to accelerate the findings from basic research into healthcare practice. NIAID-supported scientists are developing and applying new technologies to advance their efforts. These areas of focus for NIAID also are themes for the NIH Director.

<u>HIV/AIDS</u>: As the HIV/AIDS pandemic enters its fourth decade, significant progress has been made in understanding, treating, and preventing this deadly disease. Antiretroviral drugs and their use in combination regimens has dramatically increased life expectancy for many HIV-infected people who have access to these medicines and adhere to treatment. Preventing HIV infection remains a top priority for NIAID and important progress has been made. For example, clinical trials have shown that men and women without HIV infection who take an antiretroviral pill as pre-exposure prophylaxis (PrEP) once a day can reduce their risk of being infected. NIAID recently launched an initiative to support studies to develop the next generation of HIV PrEP candidates, thereby developing a pipeline for these agents. In addition, a carefully

controlled clinical trial demonstrated that treating an HIV-infected person with antiretroviral drugs can dramatically reduce the likelihood that the individual will transmit HIV infection to his or her heterosexual partner. Thus, treatment of infected people benefits the infected person, and can serve as an important method for preventing the spread of HIV. Progress continues to be made in the search for an HIV vaccine as scientists are beginning to uncover the mechanisms behind the modest success seen in a clinical trial in Thailand. NIAID has joined with public and private partners in the "P5 initiative," a translational research effort to gain greater understanding of the trial results and build on these data to advance clinical research on HIV vaccine candidates. Basic research also is vital to advancing HIV vaccine efforts. NIAID intramural and extramural scientists have discovered and described in exquisite detail human antibodies that can block a wide range of HIV strains from infecting human cells in the laboratory. Building on this knowledge may foster the design of vaccines able to target multiple HIV strains. In addition, a new AIDS vaccine research consortium is supporting basic research to understand the events that occur at the earliest stages of mucosal HIV infection and how those events could be blocked or mediated by vaccine-induced immune responses.

Biodefense and Emerging and Re-Emerging Infectious Diseases: NIAID continues its focus on advancing drugs, vaccines and diagnostics for emerging and re-emerging pathogens and pathogens that can be used as agents of bioterrorism. Central to this research is NIAID's effort to change the paradigm for antimicrobial drug development from a "one-bug, one-drug" approach to a focus on broad-spectrum therapies that could be used against entire classes of pathogens. The ultimate goal is to develop products that the U.S. government can stockpile to protect the public in the event of public health crisis, whether naturally emerging or the result of a bioterror attack.

Antibiotic resistance is a major public health threat and a longstanding research focus for NIAID. NIAID recently funded four new contracts for large-scale clinical trials to evaluate treatment alternatives for diseases where antibiotics are prescribed most often, including acute otitis media, community-acquired pneumonia, and diseases caused by Gram-negative bacteria such as *E. coli* and *Salmonella*.

Vaccines are critical tools in protecting the public against emerging and re-emerging infectious diseases. Each year, seasonal influenza is estimated to kill an average of 24,000 Americans ¹ and costs billions of dollars. Pandemic influenza can produce even greater devastation. NIAID ranks among its top science priorities the development of a "universal" influenza vaccine that protects against multiple influenza strains. A universal flu vaccine would eliminate the need to modify the influenza vaccine each season. In this regard, NIAID intramural researchers recently demonstrated that a "prime-boost" vaccine strategy protected animals from infection with multiple strains of influenza. The vaccine produced an "unnatural immunity", inducing a response to parts of the influenza virus that are conserved between even distantly related virus strains. More recently, this approach was evaluated in two small clinical trials, with participants producing evidence of cross-protective antibodies. A universal flu vaccine would be an extraordinary improvement over today's seasonal flu vaccines, resulting in considerable savings and saved lives.

-

¹ Thompson, MG et al., Estimates of Deaths Associated with Seasonal Influenza --- United States, 1976—2007, MMWR 2010; 59(33);1057-1062

NIAID-supported investigators also are working to develop a vaccine against malaria. An effective malaria vaccine would produce large economic benefits by reducing healthcare costs and helping to stabilize the economies of countries where malaria is endemic. Promising initial results from a large, industry-supported trial of the RTS,S vaccine provided a measure of optimism, as about 50 percent of children were protected against serious disease. The RTS,S vaccine candidate is a recombinant protein that fuses part of the malaria-causing parasite *P. falciparum* with the hepatitis B virus surface antigen. NIAID now is testing multiple vaccine candidates and strategies that might improve on the RTS,S vaccine approach. For example, the Institute has started a trial of a novel vaccine approach using irradiated sporozoites, one of the life-cycle stages of the malaria parasite. Studies testing this vaccine in humans have started at the NIH Clinical Center, with results expected in Summer, 2012.

Infectious and Immunological Diseases: In the realm of immune-mediated diseases, NIAID spearheads efforts to understand human immune responses more fully and supports the development of novel models and bioinformatics tools to identify and understand the mechanisms underlying human immunology. NIAID research resources facilitate the transition of basic discoveries to applied product development, and the Institute participates in an FDA-NIH effort to develop regulatory science and facilitate the translation of discoveries into new products.

NIAID-funded studies continue to advance the treatment and prevention of immune-mediated diseases such as allergies and asthma. A NIAID-supported clinical trial showed that adding the anti-IgE antibody, omalizumab, to the asthma treatment regimen of inner-city children significantly reduced their asthma symptoms and nearly eliminated seasonal asthma exacerbations. NIAID also supports development of approaches to treat or prevent food allergies that affect approximately four percent² of children in the United States. For example, an oral immunotherapy trial that found that egg could be safely introduced into the diets of 75 percent of egg-allergic children. An immunotherapy trial in peanut-allergic adolescents and young adults showed that among the 70 percent of subjects deemed "treatment responders", the median dose of peanut tolerated in an oral food challenge increased more than 100-fold from baseline to a level believed to provide substantial protection from most accidental exposures.

In keeping with the NIH Director's focus on accelerating discovery through technology, NIAID has been a leader in supporting the use of genomics technologies to study infectious diseases. The Institute has supported the successful sequencing of thousands of microbial genomes; NIAID genomics activities provide the scientific community with genomic data as well as resources such as reagents, databases, software, and computational tools essential for analyzing and applying research findings. Data and resources generated through these genomics initiatives are rapidly made available to the scientific community. Coupled with other biochemical and microbiological information, sequence data are helping scientists to identify specific strains of microbes, develop sequence-based detection technologies and diagnostics, and identify targets for new drugs and vaccines.

For more than 60 years, NIAID has conducted and supported basic and clinical research on infectious and immune-mediated diseases leading to the development of vaccines, therapeutics,

² NCHS data brief no.10, NCHS, Sept 2008

and diagnostics that have significantly improved the health and saved the lives of millions around the world. NIAID will continue to support the highest quality research, with the aim of translating fundamental discoveries into improved public health.

Overall Budget Policy: The FY 2013 President's Budget request is \$4,495.307 million, an increase of \$10.210 million or 0.23 percent, above the FY 2012 Enacted level. Within the President's Budget request, the non-competing and competing grants will be funded 1.0 percent below the FY 2012 Enacted level. In FY 2013, NIAID will support new investigators on R01 equivalent awards at success rates equivalent to those of established investigators submitting new R01 equivalent applications. The average cost of competing grants will be reduced by 1.0 percent. NIAID will continue to support basic and applied research to prevent, diagnose, and treat infectious and immune-mediated illnesses, including illness from emerging infectious diseases, agents with bioterrorism potential, HIV/AIDS, tuberculosis, malaria, autoimmune disorders, asthma, and allergies.

In FY 2013, NIH will provide an increase of 2.0 percent for stipends levels under the Ruth L. Kirschstein National Research Service Award training program consistent with recommendations from the National Academy of Sciences. The NIAID's Intramural Research and Research Management and Support programs will receive no increases in FY 2013. Funds are included in RPGs and R&D contracts to support trans-NIH initiatives, such as the Basic Behavioral and Social Sciences Opportunity Network (OppNet).

Program Description and Accomplishments

HIV/AIDS: NIAID is committed to a robust basic, translational, and clinical research program to prevent HIV infection and improve treatment for AIDS and its associated co-infections and co-morbidities. The program supports basic HIV research to understand how the virus causes disease and how the immune system responds to infection. The Martin Delaney Collaboratoryan initiative that aligns with the NIH Director's emphasis on advancing basic and translational research – aims to gain insights into HIV reservoirs in the body. The program, named in honor of the late AIDS activist, will expand researchers' basic knowledge of HIV latency and persistence so that strategies for eradicating the virus can be evaluated. NIAID also supports translational and clinical research to develop HIV/AIDS medical products and strategies to prevent and control the disease – a focus that reflects the NIH Director's emphasis on advancing translational science. A central part of this effort is NIAID's extensive domestic and international clinical trials networks (CTNs), which enable the HIV/AIDS research community to assess the safety and efficacy of vaccines, microbicides, and antiretroviral drugs in various populations. A major NIAID effort will culminate in FY 2013 as NIAID implements strategies to restructure its CTNs. The restructured CTNs will address new – and broader – research ideas to prevent and treat tuberculosis and hepatitis C, common co-infections in HIV-infected people. The Pox-Protein Public-Private Partnership will build on the results of the promising RV144 vaccine trial also known as the "Thai trial." The partnership will advance a similar HIV vaccination strategy through clinical development and, if successful to licensure, based on testing in populations with high HIV incidence in Southern Africa and Thailand. While NIAID builds on promising findings that treating infected individuals can prevent the spread of HIV to uninfected individuals, the Institute is also focused on developing strategies to minimize

morbidity and mortality for treated individuals. For example, the NIAID-funded *Strategic Timing of Antiretroviral Therapy (START)* study will determine the optimal time to initiate treatment of asymptomatic HIV infected individuals in order to maximize their long term health. The results from these and other NIAID-funded studies promise to reduce the global human and economic costs of HIV/AIDS.

Budget Policy: The FY 2013 President's Budget request for the extramural component of the HIV/AIDS research is \$1,330.398 million, an increase of \$7.811 million or 0.60 percent above the FY 2012 Enacted level. The FY 2013 AIDS research plan was carefully crafted to support the goals of the President's National HIV/AIDS Strategy as well as long-range strategic priorities for AIDS research. The plan balances support of high-priority research initiatives in AIDS research with support for the best investigator-initiated research. A critical focus of the FY 2013 AIDS research plan is a renewed focus on vaccine discovery research and continued support for the research to understand the pathogenesis of HIV disease. FY 2013 funding will continue to support a broad range of research, from basic discovery through clinical trials on vaccine and topical microbicide candidates as well as other prevention strategies. Key research activities include activities to advance vaccine discovery, to identify novel approaches to interrupt HIV transmission and to increase understanding of the complex interactions of HIV with the immune system by using a systems biology approach.

Program Portrait: Preventing the Spread of HIV by Treating Infected Individuals

FY 2012 Level \$58.0 million FY 2013 Level \$58.0 million Change \$ 0.0 million

Since the first cases of AIDS were diagnosed three decades ago, more than 30 million people have died from the disease and more than 60 million people have been infected worldwide. With the advent of highly active antiretroviral therapy (HAART), however, HIV has been transformed into a manageable, chronic disease. While a vaccine would be the most effective method to prevent the spread of HIV, recent advances have shown that antiretroviral therapy (ART) can also be effective in preventing acquisition in uninfected people as well as lowering the transmission rates in couples in which one partner has tested positive for HIV and the other has not. The concept of using ART as a tool for HIV prevention is not new. A prime example of the impact of ART as prevention has been the decrease in mother to child transmission of HIV in the developed world due to ART given to mothers before and/or during childbirth. Building on this, results from a recent NIAID-supported study, HPTN 046, showed that extending daily infant nevirapine from 6 weeks to 6 months lowered the risk of HIV transmission through breastfeeding. Ultimately, these findings extend the period for safe, exclusive breast feeding for women and their babies where the lack of safe, clean water precludes formula feeding. Through its HIV Prevention Trials Network (HPTN), NIAID conducted a phase III clinical trial (HPTN 052) which showed for the first time that treating an HIV-infected individual reduces the risk of sexual transmission of HIV to an uninfected partner. This is extremely important news since previous data about the potential value of ART in making HIV-infected individuals less infectious to their sexual partners came largely from observational and epidemiological studies. In addition, results from the ChemiPrEx study provided the first evidence that ART used as pre-exposure prophylaxis can reduce the risk of acquiring HIV infection. These promising results encouraged NIAID to continue investigating the effectiveness of HIV treatment as a prevention strategy. For example, HPTN 065 is currently evaluating how testing, treatment, education, and awareness can prevent HIV at the community level. Another ongoing trial conducted by NIAID's Microbicide Trials Network is evaluating oral versus topical use of ART for preventing the sexual transmission of HIV in women. A study currently being developed (HPTN 071) will assess the impact of a prevention package that includes voluntary testing, counseling, and early initiation of ART in Zambia and South Africa. Together, these studies align with the NIH Director's determination to advance translational sciences. They will be critical in developing a comprehensive prevention approach that could successfully control and eventually halt the spread of HIV.

Biodefense and Emerging Infectious Diseases: NIAID leads the NIH research and development program for medical countermeasures against potential terrorist attacks using biological or chemical weapons, and/or radiation. Over the past ten years, NIAID's role in supporting biodefense research has evolved. Today, NIAID has a "dual mandate" to conduct research on important infectious agents that might be deliberately introduced into a community through a bioterrorist event or that arise naturally. As such, the NIAID biodefense research effort is integrated into the Institute's larger emerging and re-emerging infectious diseases portfolio. To combat microorganisms that can be used as biological weapons and those that can re-emerge with new properties (such as drug resistance), NIAID supports basic research to determine how these infectious agents cause disease and how the immune system combats them. NIAID also supports translational research to aid in the development of needed medical countermeasures. The physical and intellectual research infrastructure that NIAID has built over the years is critical to the development of medical countermeasures and has increased the nation's ability to respond to new and re-emerging infectious diseases. This comprehensive infrastructure includes:

- Regional Centers of Excellence (RCEs) for Biodefense and Emerging Infectious Diseases-Eleven multidisciplinary research teams, based at universities nationwide, providing resources and communication systems that rapidly can be mobilized and coordinated with regional and local systems in response to an urgent public health event.
- Cooperative Centers for Translational Research on Human Immunology and Biodefense Eight centers that aim to translate research on immunity to infection into clinical applications to protect the public against bioterrorist threats.
- *Vaccine and Treatment Evaluation Units (VTEUs)* Clinical sites located at universities nationwide that provide extensive clinical trials capacity and expertise. The VTEUs played a key role in testing the vaccine for the 2009 H1N1 influenza pandemic.

NIAID recently awarded five contracts to support the development of "broad-spectrum" therapies, drugs that can be used against multiple organisms, rather than a single organism. Such broad-spectrum therapeutics can improve preparedness for all infectious threats, whether they occur naturally or are deliberately introduced. An essential goal of the NIAID medical countermeasure development program is to supply the Biomedical Advanced Research and Development Authority (BARDA) with candidate products for advanced development. To date, several candidates have been transitioned from NIAID to BARDA, including a broad spectrum antiviral that potentially can be used to treat DNA viruses such as smallpox, adenoviruses, and herpes simplex viruses; a vaccine against smallpox and another against anthrax; and several therapeutics against anthrax, smallpox, and pandemic influenza. NIAID continues to support the development of medical countermeasures against pathogens such as smallpox, anthrax, Ebola, Marburg, botulism, and pandemic influenza, many of which pose potential threats to the United States and international communities. NIAID will continue to support and advance the development of medical countermeasures against the potential threat of radiological, nuclear, and biological weapons as well as deadly emerging and re-emerging infectious diseases.

<u>Budget Policy</u>: The FY 2013 President's Budget request for the extramural component of biodefense and emerging infectious diseases research supported by NIAID is \$1,307.589 million, an increase of \$1.372 million and 0.11 percent above the FY 2012 Enacted level. NIAID will

continue to focus on basic research, such as systematic evaluations of microbe-host interactions, and its application to product development such as vaccines for pandemic influenza, and viral hemorrhagic fevers; candidate therapeutics for high priority viral pathogens such as the viruses that cause smallpox and viral hemorrhagic fevers; new drugs and diagnostics to counter drug-resistant pathogens including MDR/XDR TB; and the development of platform technologies to support the development of a broad range of therapeutic agents. NIAID will fund a new initiative "Development of Therapeutic Products for Biodefense" which will advance promising candidate therapeutics for select high priority biothreat pathogens and toxins, with a special emphasis on therapeutics with broad spectrum activity or that address antimicrobial resistance.

Program Portrait: Reducing the Threat of Antimicrobial Drug Resistance to Public Health

FY 2012 Level \$275.0 million FY 2013 Level \$275.3 million Change \$ 0.3 million

Infectious microbes have a remarkable ability to evade and resist the actions of antimicrobial drugs. Combined with the overuse of antibiotics, this has led to an increase in the number of drug resistant infections. To that end, NIAID supports and conducts research on many aspects of antimicrobial (drug) resistance, from basic research on how microbes develop resistance to clinical trials that translate research from lab findings to potential treatments. NIAID has invested considerable resources into basic research that aims to understand the make-up and behavior of microbes and how drug resistance develops. In addition, NIAID provides a broad array of preclinical and clinical research resources and services to researchers to bridge gaps in the product development pipeline and lower the financial risks incurred by industry in the development of novel antimicrobials.

NIAID's Partnerships Program supports collaborative efforts and multidisciplinary approaches to advance candidate products or platform technologies through the product development pathway, and has supported numerous grants addressing resistance. This program is an evolution of the original Challenge Grants program, established through the support of the United States Congress in 2000. Some examples of specific initiatives pursued under this program include the "Partnerships for the Development of Therapeutics and Diagnostics for Drug-Resistant Bacteria and Eukaryotic Parasites" focused on advancing the development of diagnostics and therapeutics for drug-resistant pathogens (19 projects awarded in 2010), and an FY12 initiative that will be funded in the near future, "Targeting Resistance in Select Gram-Negative Pathogens," designed to stimulate innovation in the discovery and development of novel therapeutic approaches for infections caused by resistant Gram-negative bacteria.

NIAID launched a series of initiatives beginning in 2007 to support targeted clinical trials to reduce the risk of antimicrobial resistance. These initiatives were designed to establish optimal use of currently available antibacterial drugs in a variety of clinical settings and to find treatment regimens that limit emergence of drug resistance. This effort gave rise to 8 currently active clinical trials. Clinical research activities in progress include trials to evaluate how varying treatment durations affect outcomes for pediatric urinary tract infections and *staphylococcal* bloodstream infections.

In FY 2013, NIAID will form a new Leadership Group to develop and implement a comprehensive clinical research agenda to address antibacterial resistance. This program will complement ongoing clinical research activities and leverage NIAID's HIV/AIDS Clinical Trial Units and Clinical Research Sites to address the pressing global health problem of antibacterial resistance.

Infectious and Immunological Diseases: At the core of NIAID's mission is support for basic research to elucidate the workings of the human immune system. NIAID research addresses nearly 300 different infectious microorganisms. In particular, NIAID develops medical interventions and treatments for diseases of global health significance. Malaria, for instance,

poses a risk to half of the world's population and is an enormous economic and public health burden in the developing world. To combat malaria, in 2010 NIAID established 10 International Centers of Excellence for Malaria Research and in Fall 2011, NIAID investigators launched a clinical trial with intravenous administration of a new promising malaria vaccine called PfSPZ. The Institute also continues to develop candidates for future anti-malaria drugs.

NIAID supports research to better understand normal immune function and how altered responses lead to autoimmunity, immunodeficiency, allergy, and transplant rejection. NIAID's commitment is evidenced by its continued support of programs like the Inner-City Asthma Consortium, Asthma and Allergic Diseases Cooperative Research Centers, and the Immune Tolerance Network (ITN). Researchers in the ITN recently demonstrated that an antibody called rituximab, when used to treat two forms of severe vasculitis (a devastating disease of the blood vessels) provided beneficial treatment outcomes similar to those from existing therapy, but with a shorter course of treatment. Recently, NIAID-supported researchers identified a distinct pattern of gene expression in kidney transplant recipients that may help identify transplant recipients who might be able to reduce or end their use of anti-rejection drugs (immunosuppressive therapy), and thereby lessen their vulnerability to infections and cancer. NIAID is tackling some of the most vexing questions in the study of human immunology through its Human Immune Phenotyping Centers. Launched in 2010, the Centers support research to define changes in the human immune system, through human (rather than animal) studies, in response to vaccination or infection. The Centers and other NIAID human immunology programs will help us understand what constitutes a normal human immune response, and advance understanding of human response to infection, vaccination, and immunemediated inflammatory diseases. Now and in years to come, findings will assist in development of vaccines and other interventions for a variety of infectious diseases including influenza, malaria, tuberculosis, and HIV/AIDS.

<u>Budget Policy</u>: The FY 2013 President's Budget request for the extramural component of infectious and immunologic diseases (IID) research is \$1,040.273 million, an increase of \$1.027 million and 0.10 percent above the FY 2012 Enacted level. The FY 2013 IID research plan supports critical long-range research priorities of NIAID with funds carefully aligned to support key research activities which include the Partnerships for the Development of Vaccines for Selected Pathogens which will focus on developing vaccines for several pathogens including *Staph aureus* and *C. difficile*, which are responsible for significant morbidity and mortally in the U.S., result in major health care costs and can be difficult to treat due to resistance against multiple antibiotics. Funding will also continue to support research priorities on allergy/asthma and organ transplantation through initiatives such as the Asthma and Allergic Diseases Cooperative Research Center.

Program Portrait: New Directions In Adjuvant Research To Improve Vaccines

FY 2012 Level: \$35.0 million FY 2013 Level: \$41.0 million Change: \$6.0 million

Vaccines to prevent infectious diseases are among the most effective and economical measures available to improve human health. To increase their effectiveness, many vaccines include compounds called adjuvants. Alum and other adjuvants can reduce the number of shots and the amount of immunizing materials needed to produce a protective immune response. In addition, adjuvants may prove to be essential components of universal vaccines currently being developed, such as those designed to protect against multiple flu strains over multiple years. Until recently, the only adjuvant in licensed vaccines in the United States was an aluminum mixture known as alum. One other adjuvant, ASO4, is now a component of one of the licensed human papilloma virus (HPV) vaccines.

Two NIAID initiatives are energizing the adjuvant research field. NIAID established the *Innate Immune Receptors and Adjuvant Discovery Program* in FY 2003/2004 and renewed it in FY 2009. Currently, investigators supported by this program are working to identify and characterize novel compounds to be used as vaccine adjuvants or as stand-alone immunotherapeutics for the treatment of acute infection. To move beyond discovery, NIAID initiated the *Adjuvant Development Program* in FY 2008. The goal of this program is to support preclinical studies of lead vaccine adjuvants to bring them toward licensing for human use. These studies include testing safety and efficacy in animals, optimizing formulation, and comparing routes of administration and dosing.

These examples highlight how NIAID is directing the future of adjuvant research. The steps envisioned are reflected in the *NIAID Strategic Plan for Research on Vaccine Adjuvants*, released in 2011. The plan originated from a blue ribbon panel of experts convened by NIAID in November 2010. The goals of the plan are to address (1) basic immunology and early stage adjuvant discovery, (2) later stage adjuvant development and preclinical testing, and (3) clinical assessment of adjuvants. With existing productive programs and clear steps to achieve the plan's ambitious goals, continued NIAID investment will contribute to the success of future adjuvants and development of improved protective vaccines, and may reduce illness-associated healthcare costs.

Intramural Research: NIAID's intramural research program exists to improve public health through innovative research. It is critical to NIAID's ability to respond quickly to new disease challenges, and to carry out the Institute's research agenda. This multi-faceted program makes scientific discoveries that advance development of new vaccines, therapeutics, and diagnostics to treat infectious and immune-related diseases and improve human health. NIAID intramural scientists work to expand knowledge of normal immune system components and functions; define mechanisms responsible for abnormal immune function (immunodeficiency, allergy and autoimmunity); understand the biology of infectious agents (viruses, bacteria, fungi, parasites) and the host response to infection; and develop strategies to prevent and treat immunologic, allergic, and infectious diseases, such as dengue fever, malaria, or seasonal and pandemic influenza. NIAID scientists are making fundamental contributions toward development of a universal influenza vaccine that would protect against multiple strains over several years instead of relying on annual influenza vaccines numerous candidate HIV vaccines, and a fast, sensitive blood test to detect variant Creutzfeldt-Jakob disease, a type of prion disease in humans that leads to brain damage and death. The intramural research program offers basic and clinical investigators from diverse scientific backgrounds access to state-of-the-art facilities and technologies at the NIH Clinical Center. In addition, a host of career development and training

opportunities helps ensure that the United States will have the highly trained biomedical research needed to meet tomorrow's public health challenges, and reflects the NIH Director's focus on encouraging new investigators and new ideas. The three arms of the intramural program are: 1) laboratories in Maryland and Montana in which NIAID employees conduct basic and clinical research related to infectious diseases, immunology and allergies; 2) a Vaccine Research Center to facilitate the development of effective vaccines for human disease, notably HIV/AIDS, Ebola/Marburg, and influenza, and 3) the Division of Clinical Research which facilitates the efficient and effective performance of NIAID clinical research programs in both domestic and international sites.

<u>Budget Policy</u>: The FY 2013 President's Budget request for Intramural Research is \$536.010 million, the same as the FY 2012 Enacted level. The FY 2013 Intramural Research plan supports critical long-range research priorities of NIAID, with funds carefully aligned to support key research activities. These include the continued support for all aspects of research on infectious diseases such as AIDS, malaria, and influenza, including the causative agent, vectors and the human host. In addition, we are developing countermeasures against bioterrorism through basic research and our strong clinical research component allowing key lab discoveries to be rapidly translated into methods to prevent, diagnose, or treat disease.

Research Management and Support (RMS): NIAID RMS activities provide administrative, budgetary, logistical, and scientific support in the review, award, and monitoring of research grants, training awards and research and development contracts. RMS activities include strategic planning, coordination, and evaluation of the Institute's programs, as well as regulatory compliance, international coordination, and liaison with other Federal agencies, Congress, and the public.

<u>Budget Policy</u>: The FY 2013 President's Budget request is \$281.037 million, the same as the FY 2012 Enacted level. The total number of NIAID FTEs is slated to decrease from 1,859 in FY 2012 to 1,841 in FY 2013. The 1,841 FTE request for FY 2013 includes 946 FTE for RMS with the remainder in Intramural Research.

Budget Authority by Object (Dollars in Thousands)

		FY 2012 Enacted	FY 2013 PB	Increase or Decrease
Total co	ompensable workyears:			
	Full-time employment	1,859	1,841	(18)
	Full-time equivalent of overtime and holiday hours	0	0	0
	Average ES salary (in dollars)	\$173,800	\$173,800	\$0
	Average GM/GS grade	12.2	12.2	0.0
	Therage Gill Ob grade	12.2	12.2	0.0
	Average GM/GS salary (in dollars)	\$98,067	\$98,067	\$0
	Average salary, grade established by act of			
	July 1, 1944 (42 U.S.C. 207) (in dollars)	\$98,351	\$98,351	\$0
	Average salary of ungraded positions (in dollars)	131,425	131,425	0
		TT/ 2012	TT7 2012	
	OD IECT CLASSES	FY 2012	FY 2013	Increase or
	OBJECT CLASSES	Enacted	PB	Decrease
11.1	Personnel Compensation: Full-time permanent	\$129,583	\$129,132	(\$451)
11.1	Other than full-time permanent	62,639	62,390	(249)
11.5	Other personnel compensation	6,264	6,240	(24)
11.7	Military personnel	4,428	4,479	51
11.8	Special personnel services payments	22,647	22,552	(95)
	Total, Personnel Compensation	\$225,561	\$224,793	(\$768)
12.0	Personnel benefits	\$57,571	\$57,337	(\$234)
12.2	Military personnel benefits	3,145	3,183	38
13.0	Benefits for former personnel	0	0	0
	Subtotal, Pay Costs	\$286,277	\$285,313	(\$964)
21.0	Travel and transportation of persons	\$10,040	\$9,035	(\$1,005)
22.0	Transportation of things	1,069	1,069	0
23.1	Rental payments to GSA	10	10	0
23.2	Rental payments to others	0	0	0
23.3	Communications, utilities and			
	miscellaneous charges	4,044	4,044	0
	Printing and reproduction	154	137	(17)
25.1	Consulting services	15,194	15,248	54
25.2 25.3	Other services Purchase of goods and services from	145,024	145,462	438
23.3	government accounts	531,982	565,270	33,288
25.4	Operation and maintenance of facilities	5,448	5,468	20
25.5	Research and development contracts	802,036	806,989	4,953
25.6	Medical care	2,796	2,806	10
	Operation and maintenance of equipment	9,784	9,823	39
25.8	Subsistence and support of persons	0	0	0
25.0	Subtotal, Other Contractual Services	\$1,512,264	\$1,551,066	\$38,802
26.0	Supplies and materials	\$45,779	\$45,953	\$174
31.0	Equipment	9,690	9,724	34
32.0	Land and structures	2	2	0
	Investments and loans	0	0	0
41.0		2,615,764	2,588,950	(26,814)
	Insurance claims and indemnities	1	1	0
43.0	Interest and dividends	3	3	0
44.0	Refunds	0	0	0
	Subtotal, Non-Pay Costs	\$4,198,820	\$4,209,994	\$11,174
	Total Budget Authority by Object	\$4,485,097	\$4,495,307	\$10,210

Includes FTEs which are reimbursed from the NIH Common Fund.

Salaries and Expenses (Dollars in Thousands)

	FY 2012	FY 2013	Increase or
OBJECT CLASSES	Enacted	PB	Decrease
Personnel Compensation:			
Full-time permanent (11.1)	\$129,583	\$129,132	(\$451)
Other than full-time permanent (11.3)	62,639	62,390	(249)
Other personnel compensation (11.5)	6,264	6,240	(24)
Military personnel (11.7)	4,428	4,479	51
Special personnel services payments (11.8)	22,647	22,552	(95)
Total Personnel Compensation (11.9)	\$225,561	\$224,793	(\$768)
Civilian personnel benefits (12.1)	\$57,571	\$57,337	(\$234)
Military personnel benefits (12.2)	3,145	3,183	38
Benefits to former personnel (13.0)	0	0	0
Subtotal, Pay Costs	\$286,277	\$285,313	(\$964)
Travel (21.0)	\$10,040	\$9,035	(\$1,005)
Transportation of things (22.0)	1,069	1,069	0
Rental payments to others (23.2)	0	0	0
Communications, utilities and			
miscellaneous charges (23.3)	4,044	4,044	0
Printing and reproduction (24.0)	154	137	(17)
Other Contractual Services:			
Advisory and assistance services (25.1)	15,194	15,248	54
Other services (25.2)	145,024	145,462	438
Purchases from government accounts (25.3)	349,860	352,124	2,264
Operation and maintenance of facilities (25.4)	5,448	5,468	20
Operation and maintenance of equipment (25.7)	9,784	9,823	39
Subsistence and support of persons (25.8)	0	0	0
Subtotal Other Contractual Services	\$525,310	\$528,125	\$2,815
Supplies and materials (26.0)	\$45,048	\$45,196	\$148
Subtotal, Non-Pay Costs	\$585,665	\$587,606	\$1,941
Total, Administrative Costs	\$871,942	\$872,919	\$977

Details of Full-Time Equivalent Employment (FTEs)

		FY 2011 Actual			FY 2012 Enacted			FY 2013 PB	
OFFICE/DIVISION	Civilian	Military	Total	Civilian	Military	Total	Civilian	Military	Total
Office of the Director									
Direct:	347	5	352	347	5	352	345	5	350
Reimbursable:	0	0	0	0	0	0	0	0	0
Total:	347	5	352	347	5	352	345	5	350
Division of Allergy, Immunology, and Transplantation									
Direct:	79	2	81	79	2	81	77	2	79
Reimbursable:	0	0	0	0	0	0	0	0	0
Total:	79	2	81	79	2	81	77	2	79
Division of Microbiology and Infectious Diseases									
Direct:	162	4	166	162	4	166	160	4	164
Reimbursable: Total:	0 162	0 4	0 166	0 162	0 4	0 166	0 160	0 4	0 164
Total.	102	4	100	102	4	100	100	4	104
Division of Acquired Immunodeficiency									
Direct:	136	7	143	136	7	143	134	7	141
Reimbursable: Total:	0 136	0 7	0 143	0 136	0 7	0 143	0 134	0 7	0 141
Total.	130	,	143	130	,	143	134	,	141
Division of Extramural Activities									
Direct:	199	0	199	199	0	199	198	0	198
Reimbursable: Total:	0	0	0 199	0 199	0	0	0	0	0 198
Total:	199	U	199	199	0	199	198	U	198
Division of Intramural Research									
Direct:	707	18	725	707	18	725	702	18	720
Reimbursable:	0	0	0	0	0	0	0	0	0
Total:	707	18	725	707	18	725	702	18	720
Vaccine Research Center									
Direct:	95	1	96	95	1	96	93	1	94
Reimbursable:	0 95	0	0 96	0 95	0 1	0 96	0 93	0	0 94
Total:	95	1	96	95	1	96	93	1	94
Division of Clinical Resarch									
Direct:	90	7	97	90	7	97	88	7	95
Reimbursable: Total:	0 90	0 7	0 97	0 90	0 7	0 97	0 88	0 7	0 95
Total	1,815	44	1,859	1,815	44	1,859	1,797	44	1,841
Includes FTEs which are reimbursed from the NIH Common Fund.	-,,,,,		2,002	2,020		-1007	-,		2,0.12
FTEs supported by funds from Cooperative Research and Development									
Agreements	0	0	0	0	0	0	0	0	0
FISCAL YEAR				Av	erage GS Gra	de			
acco					10.0				
2009 2010					12.2 12.3				
2010					12.3				
2012					12.2				
2013					12.2				

Detail of Positions

	FY 2011	FY 2012	FY 2013
GRADE	Actual	Enacted	PB
Total, ES Positions	2	2	2
Total, ES Salary	347,599	347,599	347,599
GM/GS-15	146	146	145
GM/GS-14	369	369	367
GM/GS-13	282	282	281
GS-12	229	229	227
GS-11	153	153	151
GS-10	2	2	2
GS-9	81	81	79
GS-8	33	33	32
GS-7	47	47	45
GS-6	18	18	16
GS-5	5	5	5
GS-4	11	11	11
GS-3	5	5	5
GS-2	1	1	1
GS-1	11	11	11
Subtotal	1,393	1,393	1,378
Grades established by Act of			
July 1, 1944 (42 U.S.C. 207):			
Assistant Surgeon General	0	0	0
Director Grade	25	25	25
Senior Grade	4	4	4
Full Grade	8	8	8
Senior Assistant Grade	2	2	2
Assistant Grade	1	1	1
Co-Step	4	4	4
Subtotal	44	44	44
Ungraded	485	485	481
Total permanent positions	1,446	1,446	1,431
Total positions, end of year	1,931	1,931	1,912
Total full-time equivalent (FTE)			
employment, end of year	1,859	1,859	1,841
Average ES salary	173,800	173,800	173,800
Average GM/GS grade	12.2	12.2	12.2
Average GM/GS salary	98,067	98,067	98,067

Includes FTEs which are reimbursed from the NIH Common Fund.